# Headquarters Air Force Civil Engineer Support Agency Basic Statement of Work S/R&M Acquisition Task Order Contract (SATOC)

Prepared by: HQ AFCESA, 23 September 2005

# **SATOC**

# **Basic Statement of Work**

# **Table of Contents**

Section	Title	Page
1.0.	Introduction	4
2.0	General Requirements	5
2.1	Applicable Documents	5
2.2	<b>Government Furnished Items</b>	5
2.3	Management, Planning, and Reporting Requirements	5
	<ul> <li>2.3.1 Project Management Plan</li> <li>2.3.1.1 Work Breakdown Structure (WBS)</li> <li>2.3.1.2 Contractor Quality Control Plan</li> <li>2.3.1.3 Health and Safety Plan</li> <li>2.3.1.4 Project Schedule</li> <li>2.3.2 Master Document List (MDL)</li> <li>2.3.3 Progress/Status Reporting</li> <li>2.3.4 Meetings and Conferences</li> <li>2.3.5 Points of Contact</li> </ul>	5 6 6 6 7 7 7 7 8 8
2.4	Worksite Activities and Coordination	8
	<ul> <li>2.4.1 Activities Coordination</li> <li>2.4.2 Notification Requirements</li> <li>2.4.3 Permits</li> <li>2.4.4 Environmental Protection</li> <li>2.4.5 Hazardous Material and Hazardous Waste</li> <li>2.4.6 Photo Documentation</li> <li>2.4.7 Site Access</li> <li>2.4.8 Remote Sites</li> <li>2.4.9 Project Web Site</li> </ul>	8 8 9 9 10 10 10
2.5	Construction Activities	11
	<ul><li>2.5.1 Documentation/Daily Logs</li><li>2.5.2 Material Submittals</li></ul>	11 11

	2.5.3 Mobilization	11
	2.5.4 Demolition	12
	2.5.5 Construction	12
	2.5.6 Engineering Services During Construction	12
	2.5.7 Pre-Final Inspection	12
	2.5.8 Final Inspection	13
	2.5.9 Delivery and Warranty	13
	2.5.10 As-Built Documentation	13
	2.5.11 De-mobilization	13
3.0	SATOC Delivery Methods	14
3.1	Turn-Key	14
3.2	Design-Build	14
	3.2.1 Working Drawings, Construction, Delivery and Warranty	14
3.3	Design-Build Plus	15
	3.3.1 Concept Definition	15
	3.3.1.1 Planning and Programming	15
	3.3.1.2 Project Definition	15
	3.3.2 Working Drawings, Construction, Delivery and Warranty	16
	3.3.3 Design	16
3.4	Concept/Implementation Work Plan (CWP/IWP) Construction	16
	3.4.1 CWP/IWP Format and Delivery	17
	3.4.2 CWP/IWP Construction Requirements	17
3.5	Tradition Construction: Design-Bid-Build	17
3.6	Maintenance	17

#### 1.0 INTRODUCTION

This Statement of Work (SOW) sets forth basic requirements for construction and engineering activities supporting the Sustainment, Restoration, and Modernization (S/R&M) of real property. Projects will be located at various locations worldwide. Prior to issuing any work under this SOW, the Government will develop a concept definition (CD) of the requirement either through Government in-house resources or through private consultant. The CD will clearly define the project requirements in terms of performance, appearance, criteria and/or specification with sufficient detail that permits a contractor to provide a proposal with reasonable performance, cost and schedule risk. Under Design-Build Plus (described in Section 3.3), the Contractor may be tasked to provide incidental support to the Government during the development of the CD.

This SOW is organized and developed to provide maximum flexibility in the use of this contract vehicle. Basic requirements described here are further refined through the use of individual project Task Orders (TO). Task Orders will be issued for projects at various stages of development. General performance requirements for construction activities are described in Section 2.0 of this SOW. Depending on the project development stage and level of design required, TOs will be issued for Turnkey, Design-Build (DB), Design-Build Plus(DB+), Conceptual/Implementation Work Plan Construction (CWP/IWP), or Traditional Construction as determined by the Contracting Officer in consultation with the Program Manager and base civil engineer. Each method is separately described in Section 3.0 of this SOW.

In addition to the variety of delivery types, TOs will be issued for a wide variety of S/R&M requirements. Examples include facility renovations including all sub-systems (mechanical, electrical, plumbing, fire detection/suppression, structural, architectural, etc) and infrastructure repair and construction (utilities, pavements, POL, etc). The contractor's team shall be prepared to support any sustainment (maintain), restoration (repair), and modernization (construct) of facilities and infrastructure.

The Contractor shall function as an integral team member in support of the AFCESA mission, to include sharing information with other AFCESA contractors and cooperation with communities and other Government entities.

# 2.0 GENERAL REQUIREMENTS

This section sets forth the general construction requirements for the SATOC contractor.

#### 2.1 APPLICABLE DOCUMENTS

The Contractor shall identify and comply with all applicable federal, state, and local statutes; Air Force/Military/Host Nation instructions, manuals, handbooks, regulations, guidance, and policy letters; Status of Forces Agreements (SOFA); Executive Orders (EOs); American Petroleum Institute (API) Codes; National Association of Corrosions Engineers (NACE); National Fire Protection (NFPA); Steel Structures and Painting Counsel (SSPC); National Electrical Code (NEC); Unified Facilities Criteria (UFC); and International Building Code (IBC), including changes and amendments in effect on the date of issuance of each TO. It is the Contractor's responsibility to identify and comply with applicable requirements. In the event of conflicting criteria, the contractor shall notify the contracting officer for guidance. Additional customer specific documents may be specified in each TO.

#### 2.2 GOVERNMENT FURNISHED ITEMS

Any Government Furnished Equipment, Information, or Property (GFE, GFI, GFP) will be specified in each TO.

# 2.3 MANAGEMENT, PLANNING, AND REPORTING REQUIREMENTS

The Contractor shall implement a full range of construction and engineering activities as specified in each TO and in accordance with applicable compliance documents. The Contractor shall supply labor, equipment, and materials necessary to accomplish the work assigned unless otherwise specified in each TO. The Contractor shall perform management, planning, and performance reporting to effectively secure and monitor prime and sub-contract work.

# 2.3.1 Project Management Plan (A017)

The Contractor shall prepare and submit for approval a Project Management Plan (PMP) for each TO within 14 calendar days of issuance of Notice to Proceed. The PMP shall include the following (many further described below in this section) unless otherwise specified in TO:

- Work Breakdown Structure
- A project organization chart that depicts project team members (Government and Contractor), contact information, and their responsibilities.

- Team communication plan (contractor format accepted)
- Contractor Quality Control plan
- Health and Safety Plan
- Narrative description of all task activities and assumptions (organized by WBS)
- Project Schedule

#### 2.3.1.1 Work Breakdown Structure (WBS) (A001)

The Contractor shall provide a WBS in the Constructions Specifications Institute (CSI) master format for each TO. The WBS shall be used for project planning and to report the cost and schedule status for each TO. All required tasks shall be included in the WBS.

# 2.3.1.2 Contractor Quality Control (CQC) Plan (A002)

The contractor shall provide a CQC plan for each TO. The plan shall identify personnel, procedures, control, instructions, tests and records that the contractor shall use for quality control purposes during the execution of each TO. The content of the plan shall contain:

- The project organization chart illustrating lines of authority and supervision
- Control, verification, and acceptance testing procedures for each test performed
- Procedures for tracking design and construction deficiencies
- Documentation that the CQC staff has complete authority and responsibility to take actions necessary for contract compliance
- Procedures for contract submittal distribution, processing, and tracking
- Procedures to maintain a CQC presence on site at all times during construction activities unless otherwise directed in the TO

# 2.3.1.3 Health and Safety Plan (A003)

The contractor shall provide a Project Health and Safety Plan for each TO. The Project Health and safety plan shall be kept on site at the construction management location at all times. All personnel (Contractor personnel, subcontractor personnel, government, and visitors) entering the construction site will be briefed on the health and safety plan and will be required to sign an endorsement of strict adherence to the plan. The US Army Corps of Engineers (USACE) Safety and Health Requirements Manual, EM 385-1-1 sets forth the specific requirements for the contractor's safety program. The Health and Safety Plan shall cover the following topics:

- Background (Site location and history and planned activities)
- Safety Program Organization (identification of safety program members, roles and responsibilities, contact (normal and emergency) information)
- Site Map (site delineation, points of entrance and egress, staging areas, alarms and emergency equipment, site evacuation map, and communication devices)
- Site Hazards (personal safety and environmental)

- Site Worker Training Requirements
- Personnel Protection Equipment (PPE) Requirements
- Medical Surveillance
- Monitoring (frequency, equipment and calibration, action levels)
- Site Control Areas (requiring PPE, confined spaces, etc.)
- Emergency Response Actions

# 2.3.1.4 Project Schedule (A004)

The Contractor shall provide a project schedule for each TO. The project schedule shall show all task requirements and shall follow the project WBS. The project schedule shall be developed as time-phase Gantt charts using MS Project (latest version) unless otherwise specified in the TO. The project schedule shall show deliverable milestones and shall be used for tracking work progress towards achieving milestones. Updates to the project Schedule shall be made as required throughout the project period of performance. Schedule updates showing activity extending beyond the period of performance are not an extension of the period of performance. Period of performance extensions will only be granted through TO modifications issued by the CO. AF Form 3064 or equivalent will be used to develop the progress schedule. The TO may specify the project schedule to be resource loaded.

#### 2.3.2 Master Document List (MDL) (A005)

The Contractor shall create and maintain a MDL for each TO that includes all documents, whether the documents are a deliverable or not, which are prepared during the course of the TO. The MDL will also contain the PMP, material and data submittal register, contract progress/status reports, and daily construction log documentation. The MDL and its documents shall be maintained in libraries readily available for submittal to the Government.

# 2.3.3 Progress/Status Reporting (A006)

The contractor shall provide monthly Progress Reports of each TO. Report frequency can be modified in the TO. Progress Reports will be submitted NLT the 15th calendar day of the following month and shall contain information about contract, contract performance, schedule, deliverables, and cost. The Progress Report shall also describe progress of activities necessary to achieve the project objectives and shall contain a description of activities accomplished during the month, activities forecasted for the future months, and problems and issues associated with the performance of the statement of work. The AF Form 3065 or approved equivalent shall be used.

For cost-plus type TOs, the contractor shall provide a Funds and Man-hour Expense Report (FMER) (A007). The Contractor shall implement and maintain a cost accounting system and

prepare a FMER to correlate the status of expensed funds and man-hours against the progress of the work completed and the negotiated budget. The FMER and associated graphics shall detail the current project status and identify funds and man-hours required to complete the assigned tasks.

Quarterly reports shall be required detailing small business participation (A018). These reports will be reviewed as part of the Fair Opportunity selection criteria for follow on task orders. Include information on the extent and type of small business concern subcontracting, the variety of small business subcontractors, and the complexity of work performed by the small business subcontractor. All information shall be archived in an electronic format compatible with AFCESA information systems (currently Microsoft Office Professional products).

# **2.3.4** Meetings and Conferences (A008, A009, A010, A014)

The Contractor shall perform a site visit and/or attend a preproposal conference. Additional requirements may be specified in each TO. The Contractor also shall attend and/or support meetings and teleconferences to discuss technical requirements, issues and project progress and status. The Contractor shall prepare, and submit for review, presentation materials for meetings and an agenda. The Contractor shall prepare minutes for all meetings attended.

#### 2.3.5 Points of Contact

POCs for management, planning, and reporting will be specified for each TO.

#### 2.4 WORKSITE ACTIVITIES AND COORDINATION

#### 2.4.1 Activities Coordination

The Contractor shall coordinate worksite activities with applicable personnel to ensure the protection of human health and the environment; the prevention of damage to property, utilities, materials, supplies, and equipment; and the avoidance of work interruptions. The Contractor shall provide physical security to work areas with security equipment and personnel. The Contractor must comply with Occupational Safety and Health Administration (OSHA) safety and health regulations and local safety office requirements. The Contractor is required to provide the CO copies of OSHA report(s) submitted during the duration of the TO. For areas not covered by OSHA, the contractor shall comply with host-nation laws and regulations regarding safety and health and the U.S. Army Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1

#### 2.4.2 Notification Requirements

The Contractor is required to notify the Contracting Officer (CO) and COR of critical issues that may affect the contract performance and/or human health and the environment. For critical issues pertaining to human health and the environment, the Contractor shall immediately notify the CO and stop work. Work shall only resume at the direction of the CO following resolution of the issue.

#### **2.4.3** Permits (A011)

The Contractor shall develop, coordinate, and assist the installation in applying for and obtaining host nation, federal, state, local, and other applicable permits, access (including off-base easements and leases), agreements, licenses, and certificates required to perform and complete each TO. The contractor shall also process an AF Form 103, Work Clearance Request, through the local base civil engineer office. The Contractor shall maintain a library of these documents at the Contractor's site office on base as well as the corporate facility handling each TO. The Contractor shall comply with applicable permit conditions.

#### 2.4.4 Environmental Protection

Activities shall be planned and implemented in a manner that protects existing site utilities, structures, surface features, service operations, and the general site environment. This includes the protection of trees, shrubs and other vegetation not in the affected zone from dust damage, soil compaction, and physical contact with machines and equipment. If appropriate, the Contractor shall conserve uncontaminated topsoil by removal, storage, or redistribution. All reasonable measures shall be taken to minimize and suppress fugitive emissions of dust, vapors, and other site materials during site work. All fill materials shall be non-contaminated. The Contractor shall conduct operations and activities with the intent of reducing the amount of pollution generated. Specific areas to be focused on are generation of solid waste, use of hazardous materials, use of ozone depleting chemicals, generation of hazardous waste, and use of energy and water. The Contractor shall plan, construct, operate, maintain, optimize, and commission systems necessary to control storm water run-on and run-off; and transport surface water drainage to a treatment plant, discharge location, or other destination. The TO may also include incidental environmental support to construction projects such as hazardous materials abatement and soil remediations.

#### 2.4.5 Hazardous Material and Hazardous Waste

The Contractor shall handle hazardous materials and waste in accordance with applicable host nation, federal, state, and local requirements. The Contractor shall provide hazardous materials use and hazardous waste disposal documentation to the installation POC, and shall register with the Hazardous Materials Pharmacy program (if available) at the installation to ensure appropriate

and efficient tracking of the Contractor's hazardous material purchases, inventories, use, and releases such as required by the Emergency Planning and Community Right-to-Know Act (EPCRA), EOs, or installation reporting requirements.

The Contractor shall also comply with host nation, federal, state, and local requirements for tasks involving the transportation of hazardous wastes and/or contaminated materials to off-site treatment, storage and/or disposal facilities. This includes 40 CFR 260, 49 CFR 172, 173, 178, 179 and other applicable local, state, federal, and host nation transportation regulations.

#### 2.4.6 Photo Documentation (A012)

The Contractor shall prepare digital photo documentation of construction work. Additional requirements may be specified in the TO. Digital photos will be submitted in JPEG format unless otherwise specified in the individual TO. The contractor shall provide an index for each set of photographs submitted identifying the base, project number, contractor, and a brief description. Photography of any kind must be coordinated through the installation, customer, or facility Point of Contact (POC).

#### 2.4.7 Site Access

The Contractor shall obtain and monitor assigned security badges and/or identification (used by both prime contractor and subcontractor staff) used during the duration of this contract. All security badges or passes shall be returned to the base POC upon expiration of the badge, upon completion of the project, or when possession of the badge is no longer necessary (e.g., upon removal of contracted personnel from specific projects).

#### 2.4.8 Remote, Austere, and Hostile Sites

The Contractor may perform work at remote, austere, and hostile locations as specified by each TO. The Contractor shall be responsible for personnel, supplies, equipment, and infrastructure (including, but not limited to, potable water, utility systems, housing, dining, transportation, and medical care) when there are no facilities and services available. The TO may also specify the Contractor to provide security of personnel, supplies, equipment, and infrastructure.

# 2.4.9 Project Web Site

The task order may require the Contractor to establish a project web site with real-time worldwide access available to AFCESA personnel within 15 days after NTP. The web site may include, but not be limited to, a submittal tracker or submittal register, a Request for Information

(RFI) tracker, a photo log, project schedule, and project status for each construction TO. The web site shall be tailored to the individual projects.

#### 2.5 CONSTRUCTION ACTIVITIES

Upon approval of the CO, the Contractor may commence on-site construction activities. The Contractor shall provide the manpower, equipment, material, services, and transportation necessary to review, plan, develop and implement quality control and construction management services during the construction phase of each TO. Details regarding construction management requirements, inspection and testing, construction facilities and temporary controls, environmental protection, quality control system, construction quality control, and project closeout will be provided in each TO.

# 2.5.1 Documentation/Daily Logs (A019)

The Contractor shall maintain daily log books documenting the activity each day during construction for each TO. The log book shall document people entering and leaving the construction site, discussions held, issues identified, actions needed, resolutions reached, and other pertinent information. The log books shall be kept on-site at all times. The AF Form 1477 or approved equivalent shall be used for all log books. Copies of the log books will be turned over to the Government at the conclusion of the project.

# 2.5.2 Material and Data Submittals (A016)

The Contractor shall develop and maintain a master list of material and data submittal requirements and status for each TO. The SAF/ACQP Schedule of Material Submittals or approved equivalent shall be used. Any specific material submittals requested will be defined in the TO. The status should include current status (approved, reviewing, rejected), dates of action (open, closed, and projected), and responsible party for the action for each submittal. The material submittal master list shall be kept on site during construction. All Material Submittals shall be accomplished in accordance with the instructions pertaining to AF Form 3000, Material Approval Submittal.

#### 2.5.3 Mobilization

The Contractor shall perform mobilization activities as necessary to prepare the construction site for construction activities. The Contractor shall evaluate existing utilities to determine adequacy and need for modifications to support site construction activities. The Contractor shall establish a construction management location via either temporary trailers or space allocated by the Base. The Contractor shall obtain appropriate approvals and shall construct connections or new

systems for electrical power, water, sewer, gas distribution, telephone, and other utilities, as required, to accomplish the activities specified in each TO. The Contractor shall also erect or install support buildings, equipment enclosures, and storage facilities for construction materials and waste materials awaiting disposal.

#### 2.5.4 Demolition

The Contractor shall demolish facilities, systems, and other improvements as required in each TO. Demolition activities can be incidental to other requirements or a stand-alone project. The Contractor shall conduct demolition efforts in conjunction with such activities as new construction or renovation, removal of outdated facilities, and site clearing from natural disasters. Prior to demolition activities, the contractor may be required to survey the facility for hazardous materials (lead, asbestos, contaminated soil, etc) and abate and dispose of hazardous materials in accordance with the criteria listed in Paragraph 2.1.

#### 2.5.5 Construction

Upon issuance of the Notice To Proceed (NTP) by the CO, the Contractor may commence onsite construction activities. The contractor shall provide the manpower, equipment, material, services, and transportation necessary to review, plan, develop, and implement quality control and oversight services during the construction phase of the TO. The Contractor shall perform construction, restoration, emergency response, repair, enhancement, maintenance, modernization, and demolition of facilities, utilities, real property systems, and infrastructure systems in support of construction and engineering requirements as specified in each TO. Shop drawings and other submittals that require approval shall be signed/approved by the CO prior to actual work placement of submitted elements. Typical activities can consist of stand-alone projects, and construction in support of other projects. Construction activities will be in conformance with local and Air Force standards and regulations.

# 2.5.6 Engineering Services During Construction

The task order may require the Contractor to provide engineering related services during construction to review submittals, coordinate technical requirements, provide conflict resolution, and to review and approve field changes. Additional engineering services during construction may be specified in the TO.

# 2.5.7 Pre-Final Inspection

The Contractor shall conduct a pre-final walk through inspection and publish the pre-final inspection findings in a pre-final inspection report in accordance with the format specified at the

pre-construction conference and defined in the TO. Additional pre-final inspection services and/or requirements may be specified in the TO.

#### 2.5.8 Final Inspection

The Contractor shall conduct a final inspection and publish the findings in a final inspection report in accordance with the format specified at the pre-construction conference and defined in the TO. The inspection shall concentrate on the items identified at the pre-final inspection and recorded in the pre-final report. The final inspection report shall certify that all items of the design have been implemented, that the construction is complete. At the final inspection, the Contractor shall present a completed DD Form 1354, Transfer and Acceptance of Real Property to the Base Civil Engineer (BCE) or other appropriate organization for signature and acceptance. Additional final inspection services and/or requirements will be specified in the TO.

# 2.5.9 Delivery and Warranty

This item is covered in general contract clauses. Additional services and/or requirements will be specified in the TO.

#### 2.5.10 As-Built Documentation (A013)

The contractor shall maintain, prepare, and deliver final as-built documentation for each TO. As-built documentation shall include a record of "signed and sealed" as-built drawings and specifications verifying that all development standards have been met. Delivery of as-built documentation shall occur prior to final payment. Additional requirements may be specified in the TO.

#### 2.5.11 De-mobilization

The Contractor shall remove temporary facilities and implement erosion control measures such as seeding, mulch, sodding, and erosion control fabrics; restore roads, structures and utilities; and plant trees, shrubbery, grasses and other vegetation. The Contractor shall document and report on activities and train Government personnel to perform required maintenance, as specified in each TO.

#### 3.0 SATOC DELIVERY METHODS

This section describes the various delivery methods AFCESA may use for supporting S/R&M requirements. Each TO will use this section to specify which method the SATOC Contractor shall use as described in Section 1.0. The Contractor shall perform a full range of activities to meet all customer's engineering and construction requirements as described in the TO. Requirements may include design, construction, demolition, repair, and emergency response activities.

#### 3.1 TURN-KEY

Under Turn-key delivery, the SATOC contractor will be responsible for the design and construction of the facility using provided performance specifications. In addition, the contractor will manage and coordinate all activities associated with delivery of the project. Typical activities may include providing swing space facilities, arranging to re-locate occupants as needed, and furnishing and equipping the facility. The SATOC contractor will serve as both the Architect of Record and the Contractor of Record.

# 3.2 DESIGN-BUILD (D-B)

Under Design-Build delivery, the SATOC Contractor will be responsible for the design and construction of a public building, facility, or work. The contractor shall manage and perform D-B construction work as defined in the TO. The following are typical D-B construction TO requirements: completion of working drawings, permitting, construction, construction management, scheduling, inspection and testing, maintaining construction facilities and temporary controls, environmental protection, quality control, construction quality control, and project closeout. The SATOC contractor will serve as both the Architect of Record and the Contractor of Record. Specific requirements will be provided at the TO level.

# 3.2.1 Working Drawings, Construction, Delivery and Warranty (A015)

The SATOC Contractor shall be responsible for the design completion, construction, and the delivery and warranting of the project/facility. Prior to beginning onsite construction, the SATOC Contractor, as directed in the RFP, will initiate the Construction Phase by completing project working drawings and the various plans and schedules, including a construction schedule using Program Evaluation and Review Technique (PERT), Critical Path Method (CPM), or equivalent scheduling tools, and obtaining submittal approvals and permits. Working drawings and specifications shall comply with codes, laws, the RFP, and the TO. The working drawings shall be submitted for review as directed in the TO statement of work. The SATOC contractor shall be responsible for implementation, coordination, and execution of all regulatory reviews,

ensure technical adequacy of the final design, and provide quality control of all phases of the TO. Further details regarding design requirements will be provided at the TO level.

# 3.3 DESIGN-BUILD PLUS (D-B+)

D-B+ is an enhancement of the D-B process. Under D-B+ delivery, the SATOC Contractor shall be integrated into the Concept Definition (CD) Phase in a support capacity. This integration will allow the Contractor's design team to be involved with a project early on and thus, facilitate the long-term understanding of the Air Force's project requirements. Moreover, the SATOC Contractor's integration into the CD Phase will allow for independent surveys of existing conditions, collaborative participation, and resolution of building concerns prior to the start of construction. The SATOC contractor will serve as both the Architect of Record and the Contractor of Record.

# 3.3.1 Concept Definition.

Concept Definition (CD) is the Government design phase of the D-B + process. This design phase is divided into two sub-phases:

- 1.) Planning and Programming
- 2.) Project Definition validation and support.

During the CD effort, the Government may either perform CD activities in-house or employ a professional consultant hereinafter referred to as the CD A-E. The CD A-E is primarily responsible for the development of the CD products and preparation of the RFP for the project. Details regarding CD Phase requirements will be provided at the TO level and as noted in the following subparagraphs.

# 3.3.1.1 Planning and Programming.

The SATOC Contractor shall provide investigative services, actively participate in constructability reviews of planning/programming documents, and prepare or assist with the preparation of planning/programming documents. The results will be incorporated into the documentation that will be used in the Project Definition sub-phase.

# 3.3.1.2 Project Definition

The SATOC Contractor may provide investigative services, actively participate in constructability reviews of CD products, and assist in the preparation of proposal documents for the same project. Investigative services consist of, but are not necessarily limited to: Geo-

technical studies, hazardous materials surveys, topographical surveys, verification of existing asbuilts, traffic studies, and value engineering. The SATOC Contractor shall use the results of these studies and investigative services as part of its cost validation efforts and again during the construction phase of the project. The results of all surveys, investigations and constructability reviews may be incorporated into the project's final CD Phase documents at the discretion of the Government.

# 3.3.2 Working Drawings, Construction, Delivery and Warranty (A015)

At the conclusion of the CD phase, the Government will issue a separate TO and thus, transition from the CD Phase to the DB Construction Phase. During the DB Construction Phase, design completion, construction, and the delivery and warranting of the project/facility take place. The SATOC Contractor shall use the results of studies and investigations conducted during the CD Phase by the same or a different contractor. If the same contractor performs these studies and investigations during the CD Phase and is awarded the DB Construction Phase TO for the same project, then the contractor is responsible for the results of its efforts during the CD Phase.

#### 3.3.3 Design

Prior to beginning onsite construction, the SATOC Contractor, as directed in the RFP, will initiate the Construction Phase by completing project working drawings and the various plans and schedules, including a construction schedule using Program Evaluation and Review Technique (PERT), Critical Path Method (CPM), or equivalent scheduling tools, and obtaining submittal approvals and permits. Working drawings and specifications shall comply with codes, laws, the RFP, and the TO. The working drawings shall be submitted for review as directed in the TO statement of work. The SATOC contractor shall be responsible for implementation, coordination, and execution of all regulatory reviews, ensure technical adequacy of the final design, and provide quality control of all phases of the TO. Further details regarding design requirements will be provided at the TO level.

# 3.4 Concept/Implementation Work Plan (CWP/IWP) Construction

Under CWP/IWP delivery, the SATOC Contractor will be responsible for the incidental design and construction of a public building, facility, or work. The contractor shall manage and perform construction work as defined in the TO. The following are typical requirements: completion of working/shop drawings (A015), permitting, construction, construction management, scheduling, inspection and testing, maintaining construction facilities and temporary controls, environmental protection, quality control, construction quality control, and project closeout. The SATOC contractor will serve as the Contractor of Record only. Specific requirements will be provided at the TO level.

# 3.4.1 CWP/IWP Format and Delivery

The CWP/IWP will be submitted for approval by the Government. The schedule will be defined in the TO and will depend on the complexity of the project. For simpler projects, the CWP and IWP may be combined into one deliverable.

The CWP will primarily be used to illustrate the concept of the project and validate that the TO requirements are clearly understood. It shall include at minimum the project scope, background, and general descriptions of each major work element. The TO may specify additional requirements for the CWP (for example conceptual drawings).

The IWP will primarily be used to illustrate the contractor's plan to execute the work. It shall at minimum include the WBS, project schedule, submittal requirements, specifications, and drawings if applicable. The WBS and project schedule are also included in the PMP.

# 3.4.2 CWP/IWP Construction Requirements

The Contractor shall plan, develop cost estimates, install, construct, test, operate, maintain, monitor, optimize, and decommission any site in accordance with each TO. The Contractor shall perform work at remote sites and shall document all activities as stated herein.

The Contractor shall perform incidental support such as designing, planning, programming, scoping, studying, investigating, evaluating, and consulting on traditional engineering and construction efforts. The Contractor shall also provide training and operational support to Government and other contractor personnel regarding the operations and maintenance of equipment, systems, and facilities.

Upon approval of the CWP/IWP by the CO the Contractor may commence on-site construction activities. Requirements are defined in Section 2.0 and may be further defined in the TO.

# 3.5 Traditional Construction – Design-Bid-Build (D-B-B)

Under Design-Bid-Build delivery, the SATOC Contractor will be responsible for providing a line item proposal and construction of a public building, facility, or work. The contractor will be provided a complete set of specifications and construction drawings and will consider these the specific requirements for the TO. The SATOC contractor will serve as the Contractor of Record only.

#### 3.6 Maintenance

Under Maintenance, the SATOC Contractor will be responsible for the incidental maintenance of a public building, facility, or work. The contractor shall manage and perform maintenance work

as defined in the TO. The following are typical requirements: establish maintenance schedules of building systems, perform condition assessments, service equipment per manufacturer and Air Force guidelines (air handlers, pumps, boilers, valves, etc), and provide status reports.